

Occultations of Stars observed during the Lunar Eclipse of 1888, January 28. By E. Nevill, Government Astronomer.

By mischance we did not receive until two days after the eclipse the list of phenomena calculated for this observatory by Dr. Döllén, and so were dependent for our information on a copy of the list of stars occulted at the Cape, which was forwarded to us by Dr. Gill a few days before the eclipse.

The observations were made by myself with the 8-inch Grubb Refractor, power 125, the times being noted and recorded by my assistant, Mr. Grant

The Moon's limb, though eclipsed, was too bright to enable stars of the 10th or 11th magnitude to be observed with any certainty.

Star. No. on Döllén's List.	Phenomena.	Observed Greenwich Mean Time. h m s	Star. No. on Döllén's List.	Phenomena.	Observed Greenwich Mean Time. h m s
86	Reapp.	10 40 42.0	143	Disapp.	11 12 5.2
129	Disapp.	44 8.1	147	Disapp.	18 27.7
127	Disapp.	48 49.6	95	Reapp.	20 38.8
122	Disapp.	50 23.8	159	Disapp.	33 25.4
76	Reapp.	11 1 51.3	122	Reapp.	59 42.6
88	Reapp.	3 3.5	169	Disapp.	12 3 10.9
68	Reapp.	4 17.8	179	Disapp.	5 30.2
*	Disapp.	9 29.7	127	Reapp.	10 1.9
140	Disapp.	9 53.2			

In all 17, or 10 disappearances and 7 reappearances.

Natal Observatory :
1888, April 4.

Observation of the Occultation of Venus by the Moon,
1888, March 9. By John Tebbutt.

Having on the evening of the 10th instant completed a set of filar-micrometer measures of the position of the comet now visible, I turned the 8-inch telescope on the Moon to observe the occultation of *Venus*, then shining brilliantly, immediately beneath the lunar crescent. The magnifying power employed for the observation was 130 diameters, and the sky was fortunately beautifully clear. As there was considerable undulation along the Moon's limb in consequence of her low altitude I could not observe the disappearance with satisfaction. The planet's terminator was noted to be in contact with the Moon's limb at $17^h 34^m 21^s.3$ local mean time, but to my surprise the illuminated portion of the planet's disc, instead of disappearing, advanced gradually on the lunar disc till it was fully half projected on it, then suddenly at $17^h 34^m 43^s.8$ the projected portion of the disc disappeared, and the planet assumed a semicircular form with the Moon's limb as the diameter. The total disappearance of the planet was noted as accurately as possible at $17^h 34^m 57^s.7$. There was a remarkable contrast between the brilliancy of the planet and that of the Moon's limb, the former being by far superior. The reappearance was observed with the same telescope and magnifying power. The disappearance itself was a most interesting phenomenon, but the reappearance was still more interesting and indeed striking. The planet's terminator shot out from the grey sky in the field of the telescope as a brilliant streak at $18^h 56^m 18^s.6$. The definition was good, and the objects more steady than at the disappearance. The gradual progress of the Moon's dark limb over the planet's illuminated disc was watched with interest, and at $18^h 56^m 44^s.8$, but probably a second late, the last contact of limbs occurred. I believe this is the first occultation of *Venus*, and the fourth of a bright planet that I have witnessed during an experience of more than thirty years.

Windsor, N. S. Wales :
1888, March 14.